

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (original) A toll payment system which comprises:
a portable telephone on a car of a contractor of electronic toll payment service;
base stations connected with said portable telephone;
and
a server connected with said base stations,
wherein said server comprises:
a first memory for storing locations of said base stations;
a second memory for storing names of contractors or their car numbers and unit toll for each section along a highway;
a driving route identification unit for identifying a driving route of said portable telephone on the basis of said locations of said base station which are connected with said portable telephone;
a toll calculation unit for calculating a toll on the basis of said unit toll and the identified driving route; and
a toll charging unit for charging said portable telephone the calculated toll.

2. (original) A toll payment system which comprises:
a portable telephone on a car of a contractor of
electronic toll payment service;

base stations connected with said portable telephone;
and

a server connected with said base stations,
wherein:

said portable telephone comprises GPS unit for
identifying its location,

said server comprises:

a second memory for storing names of contractors or
their car numbers and unit toll for each section along a highway;

a driving route identification unit for identifying a
driving route of said portable telephone on the basis of said
locations measured by said GPS unit;

a toll calculation unit for calculating a toll on the
basis of said unit toll and the identified driving route; and

a toll charging unit for charging said portable
telephone the calculated toll.

3. (original) The toll payment system according to
claim 1, wherein said server comprises gate means for passing
said car on the basis of finishing said toll payment.

4. (original) The toll payment system according to
claim 2, wherein said server comprises gate means for passing
said car on the basis of finishing said toll payment.

5. (original) The toll payment system according to claim 1, wherein said server comprises notification means for notifying said portable telephone of an exit lane on the basis of finishing said toll payment.

6. (original) The toll payment system according to claim 2, wherein said server comprises notification means for notifying said portable telephone of an exit lane on the basis of finishing said toll payment.

7. (original) The toll payment system according to claim 1, wherein said driving route identification unit identifies said driving route of said portable telephone on the basis of connection states between said mobile station and said base stations.

8. (original) The toll payment system according to claim 7, wherein said base stations are connected with said portable telephone located at a tunnel, toll gate, or a service area along said driving route.

9. (original) The toll payment system according to claim 1, wherein said driving route identification unit identifies said driving route of said portable telephone on the basis of connection states between said portable telephone and a base station which includes a region where an exterior magnetic wave is shielded, but can be connected with said portable telephone.

10. (original) The toll payment system according to claim 2, wherein said driving route identification unit identifies said driving route of said portable telephone on the basis of connection states between said portable telephone and a base station which includes a region where an exterior magnetic wave is shielded, but can be connected with said portable telephone.

11. (original) The toll payment system according to claim 1, wherein said toll charging means charges said calculated toll, when a balance for said portable telephone is greater than said calculated toll.

12. (original) The toll payment system according to claim 2, wherein said toll charging means charges said calculated toll, when a balance for said portable telephone is greater than said calculated toll.

13. (original) The toll payment system according to claim 1, wherein said toll charging means charges said calculated toll, when said portable telephone communicates with said base stations every prescribed time interval.

14. (original) The toll payment system according to claim 2, wherein said toll charging means charges said calculated toll, when said portable telephone communicates with said base stations every prescribed time interval.

15. (original) The toll payment system according to claim 1, wherein said server further comprises a third memory for

storing an ID of said portable telephone, wherein said name of contractor and its car ID are identified by said ID of said portable telephone.

16. (original) The toll payment system according to claim 2, wherein said server further comprises a third memory for storing an ID of said portable telephone, wherein said name of contractor and its car ID are identified by said ID of said portable telephone.

17. (currently amended) A toll payment method using a portable telephone on a car of a contractor of electronic toll payment service, base stations connected with said portable telephone and a server connected with said base stations, which comprises the steps of:

storing, in a memory of said server, names of contractors or their car numbers and unit toll for each section along a highway;

identifying a driving route of said portable telephone on the basis of said locations of said base station which are connected with said portable telephone;

calculating a toll on the basis of said unit toll and the identified driving route; and

charging said portable telephone the calculated toll.

18. (currently amended) A toll payment method using a portable telephone with GPS unit on a car of a contractor of electronic toll payment service, base stations connected with

said portable telephone and a server connected with said base stations, which comprises the steps of:

storing, in a memory of said server, names of contractors or their car numbers and unit toll for each section along a highway;

identifying a driving route of said portable telephone on the basis of said locations measured by said GPS unit;

calculating a toll on the basis of said unit toll and the identified driving route; and

charging said portable telephone the calculated toll.

19. (currently amended) A computer program product for executing a toll payment method using a portable telephone on a car of a contractor of electronic toll payment service, base stations connected with said portable telephone and a server connected with said base stations, which records the steps of:

storing, in a memory of said server, names of contractors or their car numbers and unit toll for each section along a highway;

identifying a driving route of said portable telephone on the basis of said locations of said base station which are connected with said portable telephone;

calculating a toll on the basis of said unit toll and the identified driving route; and

charging said portable telephone the calculated toll.

20. (currently amended) A computer program product for executing a toll payment method using a portable telephone with GPS unit on a car of a contractor of electronic toll payment service, base stations connected with said portable telephone and a server connected with said base stations, which records the steps of:

storing, in a memory of said server, names of contractors or their car numbers and unit toll for each section along a highway;

identifying a driving route of said portable telephone on the basis of said locations measured by said GPS unit;

calculating a toll on the basis of said unit toll and the identified driving route; and

charging said portable telephone the calculated toll.

21. (original) A transportation management system which comprises:

a portable telephone;

radio base stations connected with said portable telephone in their communication areas; and

a server connected with said radio base stations,

wherein said server comprises:

a first memory for storing said radio base stations and their locations;

a second memory for storing a name of contractor of said portable telephone and a number of car of said contractor; and

a driving route identification unit for identifying a driving route of said car on the basis of the location stored in said first memory of the radio base station connected with said portable telephone.

22. (original) The transportation management system according to claim 21, wherein said driving route is identified on the basis of the location stored in said first memory of the radio base station which includes a section where exterior electromagnetic wave is shielded, but can be connected with said portable telephone.

23. (currently amended) A computer program product for a transportation management system which records the steps of:

storing, in a memory of a server, a name of a contractor of [[said]] a portable telephone and a number of a car of said contractor and tolls for each section that said portable telephone travels along;

identifying a driving route of said car on the basis of the location of [[the]] a radio base station connected with said portable telephone, ~~particularly identifying said driving route on the basis of the location stored in said first memory of the radio base station which~~ said driving route includes a section

where exterior electromagnetic wave is shielded, but can be connected with said portable telephone;

calculating a toll based on a total number of tolls that said portable telephone has passed; and

charging said portable telephone said calculated toll.